Civil Engineering Graduation Requirements
University of Washington
http://ce.washington.edu

ENGRUD Requirement Sheet – Key:
♦ = Placement Requirements;
★ = Pick one to satisfy placement requirement
Placement: July 1 at the end of the first year

Mathematics (24-25cr)
♦ ENGR 101 and GEN ST 199 (2cr)
♦ MATH 124, 125, 126 - Calc. w/ Analytic Geom I-III (15cr)
  [pr: MATH 125] OR AMATH 351
MATH 208 - Matrix Algebra with Applications (3cr)
  [pr: MATH 126] OR AMATH 352
IND E 315 - Probability & Statistics for Engineers (3cr)
  [pr: MATH 136, MATH 207 or AMATH 351]
OR STAT 390 - Statistical Methods in Engr. & Science (4cr)

Sciences (25cr)
♦ CHEM 142 - General Chemistry (5cr)
★ CHEM 152 - General Chemistry (5cr)
  [pr: CHEM 142, CHEM 143, or CHEM 145]
♦ PHYS 121 - Mechanics (5cr)
  [pr: MATH 124 or MATH 134]
★ PHYS 122 - Electromagnetism (5cr)
  [pr: MATH 125 or MATH 134; PHYS 121]
★ PHYS 123 - Waves (5cr)
  [pr: MATH 126 or MATH 134; PHYS 122]

Engineering General Education Requirements (36cr)
Written and Oral Communication:
♦ English Composition (5cr)
ENGR 231 - Intro to Technical Communication (3cr)
Additional writing (4cr) (May overlap with A&H, SSc, or DIV)

Areas of Inquiry:
Arts & Humanities – A&H (10cr)
Social Sciences - SSc (10cr)
Additional A&H or SSc (4cr)
Diversity - DIV (5cr) (may overlap with A&H or SSc)

Economics (4-5cr)
ECON 200 - Microeconomics (5cr) (can satisfy SSc),
  OR IND E 250 – Fund Engr Economy (4cr) (can satisfy Engr. Fundamentals)

Engineering General Education Requirements (16cr)
★ AMATH 301 - Beginning Scientific Computing (4cr)
  [pr: MATH 125, Q SCI 292, or MATH 134]
OR
★ CSE 122 - Computer Programming II (4cr)
OR
★ CSE 160 - Data Programming I (4cr)

Engineering Fundamentals (cont'd)
AA 210 - Engineering Statics (4cr)
  [pr: MATH 126; PHYS 121]
CEE 220 - Intro to Mechanics of Materials (4cr)
  [pr: AA 210]
ME 230 - Kinematics and Dynamics (4cr)
  [pr: AA 210]

Additional Engineering Fundamentals Course (4cr)
Choose one: A A 260; E E 215; IND E 250; M E 123; MSE 170

Civil Engineering Core (40cr)
CEE 307 - Construction Engineering (5cr)
CEE 317 - GeoSurveying (5cr)
CEE 327 - Transportation Engineering (5cr)
CEE 337 - Construction Materials (5cr)
CEE 347 - Intro to Fluid Mechanics (5cr)
CEE 357 - Environmental Engineering (5cr)
CEE 367 - Geotechnical Engineering (5cr)
CEE 377 - Intro to Structural Design (5cr)

Professional Practice & Capstone (7cr)
CEE 440 - Professional Practice Studio (2cr)
AND
Capstone (one from): CEE 441, 442, 444, or 445 (5cr)

Civil Engineering Technical Electives (15cr)
See department for a list of approved courses; this includes at least one course from three separate areas of concentration: Construction, Structural, Geotechnical, Transportation, Hydrology or Environmental.

Engineering and Science Electives (12-14cr)
a. One basic science course from approved list
b. CEE 400-level course(s) or course(s) from approved list

Free Electives (~2cr)
Additional coursework in any subject area not used elsewhere in degree.

Total credits required for graduation: 180cr

Honors or accelerated sequences of chemistry, math and physics will satisfy the placement requirements.

Updated October 2023
Civil Engineering
Sample Curriculum
University of Washington
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This is a sample four-year plan for ENGRUD students that prepares them to be able to request placement at the end of the first year. It is intended to provide a framework for ENGRUD students to reference as they create their own individual academic plan.

Courses required to request placement for ENGRUD students: ENGR 101; MATH 124, MATH 125, MATH 126; CHEM 142; PHYS 121. English Composition. ENGRUD students who are interested in CivE should choose one of the following: AMATH 301; CHEM 152; CSE 122; ME 123; MSE 170; PHYS 122, PHYS 123.

### First Year

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<thead>
<tr>
<th>Quarter</th>
<th>Courses</th>
<th>Cr</th>
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<th>Quarter</th>
<th>Courses</th>
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<td>Autumn</td>
<td>♦ MATH 124 - Calc. w Analytic Geom I</td>
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<td>Winter</td>
<td>♦ MATH 125 - Calc w Analytic Geom II</td>
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<td></td>
<td>♦ CHEM 142 - General Chemistry</td>
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<td>★ CHEM 152 - General Chemistry</td>
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<td>AA 210 - Engineering Statics</td>
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